GenCore version 5.1.3

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Minimum
Maximum
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No.
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                    and is derived by analysis of the total score distribution.
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Match
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555
                 Published_Applications_NA: *
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Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_NEM_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_NEM_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_PUBCOMB.seq:*
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/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
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US-09-963-206B-4
US-09-963-206B-4
US-09-963-206B-4
US-09-9897-006-13
US-09-9897-01-13
US-09-9872-733-15
US-09-9872-733-15
US-09-786-531B-5
US-08-786-531B-6
US-08-786-531B-4
US-08-786-531B-1
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0 US-09-886-942-19

0 US-09-897-006-4

0 US-09-897-006-5
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US-09-812-133-5
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            Sequence 5, Appli
Sequence 4, Appli
Sequence 13, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 15, Appl
Sequence 45, Appl
Sequence 6, Appli
Sequence 6, Appli
Sequence 6, Appli
                                                                                                                                                                                                                                                                                           Description
 Sequence 45
Sequence 5,
Sequence 6,
Sequence 4,
Sequence 1,
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Sequence 5, Appli
Sequence 7, Appli
Sequence 5, Appli
Sequence 5, Appli
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## ALIGNMENTS

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                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 5756
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                            Query Match 59.8
Best Local Similarity 74.6
Matches 543; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/09548880 Patent No. US20020160507A1
                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/548,880
CURRENT FILING DATE: 2000-04-13
NUMBER OF SEQ ID NOS: 1
                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: No. US20020160507Aly, Robert APPLICANT: Monsma, Scott TITLE OF INVENTION: Multiple Host ExpreFILE REFERENCE: 700399.90118
                                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: Expression OTHER INFORMATION: vector
                                                                                                                                                                                                                                                                                FEATURE:
  1014
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                                                954
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PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                   Multiple Host Expression Vector
                                                                                                                                                                                                        59.8%;
74.6%;
                                                                                                                                                                                            Score 332; DB 9;
Pred. No. 8.5e-67;
0; Mismatches 10
                                                                                                                                                                                             10; Indels 175;
                                                                                                                                                                                                                   Length 5756;
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; ORGANISM: Homo sapiens
US-09-886-942-19
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                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19, Application US/09886942
Patent No. US20020081708A1
                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver. SEQ ID NO 19
                                                                                                                            Matches 270;
                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                      APPLICANT:
TITLE OF INVENTION: NOVEL CHIMERIC PROMOTERS
FILE REFERENCE: 02-031910US
FILE REFERENCE: 02-031910US
                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/886,942
CURRENT FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/213,829
PRIOR FILING DATE: 2000-06-23
NUMBER OF SEQ ID NOS: 40
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                                                                                                                                         Local Similarity
                                                                                       2 AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGGAGTTCCGC 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTACGCCCCCTATTGACGTCAATGACGGTAAATGG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACCGCGT 1561
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                          GTTACATAACTTACGGTAAATTGGCCCGCCGGCTGACCGCCCAACGACCCCCCGCCCATTG 121
                                                                         AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGC 288
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                                                                                                                            Conservative
                                                                                                                                      46.18;
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                                                                                                                                     Score 256; DB 10;
Pred. No. 1.2e-49;
                                                                                                                            Mismatches
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APPLICANT: Bleck, Gregory
TITLE OF INVENTION: Expression Vectors
FILE REFERENCE: GALA-06415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4, Application US/09897006
Patent No. US20020106729A1
                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 4
                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/897,006
CURRENT FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: 60/215,851
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2000-07-03
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
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 394
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AGTACGCCCCTATTGACGTCAATGACGGTAAATGG
                             AGTACGCCCCCTATTGACGTCAATGACGGTAAATGG 276
                                                                                                                ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA 333
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                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                           46.18;
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                                                                                                                                                                                                                                                                                                          Score 256; DB 10;
Pred. No. 1.4e-49;
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   429
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Sequence 5, Application US/09897006

Patent No. US20020106729A1

GENERAL INFORMATION:
APPLICANT: Black, Gregory
TITLE OF INVENTION: Expression Vectors
FILE REFERENCE: GALA-06415
CURRENT APPLICATION NUMBER: US/09/897,006
CURRENT FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: 60/215,851
PRIOR FILING DATE: 2000-07-03

NUMBER OF SEQ ID NOS: 36 SOFTWARE: PatentIn version

US-09-897-006-5

ORGANISM: Artificial Sequence

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TYPE: DNA

Q ID NO 5 LENGTH: 4210

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RESULT 5
US-09-759-960-7
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Best Local Similarity
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OTHER INFORMATION: Synthetic
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NFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                               NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
                                                                                                                                                                                                             FILING DATE:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV
TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
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                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                    TELEFAX:
                                                                                                                                                                                              APPLICATION NUMBER:
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                                                  617-543-8906
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Chicz, Roman M.
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97.8%;
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Pred. No. 1.4e-49;
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122 ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA 181 

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                                                                                                                                                                                               SEQ ID NO 5
LENGTH: 4864
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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Best Local Similarity
Matches 270; Conserv
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                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/812,133
CURRENT FILING DATE: 2001-03-19
PRIOR APPLICATION NUMBER: PCT/US98/22668
PRIOR FILING DATE: 1998-10-23
PRIOR APPLICATION NUMBER: 60/063,629
PRIOR FILING DATE: 1997-10-27
                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Huckle, William R.
TITLE OF INVENTION: GENE THERAPY FOR STIMULATION OF
TITLE OF INVENTION: ANGIOGENESIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Thomas, Kenneth A.,
APPLICANT: Kendall, Richard L.
APPLICANT: Bett, Andrew J.
                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: 20073P
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62 GITACATAACTTACGGTAAATTGGCCCGCCGGCTGACCGCCCAACGACCCCCGCCCATTG 121
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STRANDEDNESS: double
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                                                                                                                      Local Similarity
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Pred. No. 1.4e-49;
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Pred. No. 1.4e-49;
                                                                                                        Mismatches
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Mismatches
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APPLICANT: Ferrick,
APPLICANT: Swift, S
APPLICANT: Armstron
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 09/076,624
PRIOR FILING DATE: 1998-05-12
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn version 3.1
SEQ ID NO 5
LENGTH: 5713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 5, Application US/09966976A Patent No. US20020168649A1
                                                                                           Sequence 5, Application US/09963206B Patent No. US20020123076A1
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Best Local
                                                                            GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Methods and Compositions for Screening for Modulators and Ige Syntitle OF INVENTION: Secretion and Switch Rearrangement FILE REFERENCE: A-66038-4/RMS/JJD/DLR CURRENT APPLICATION NUMBER: US/09/966,976A
CURRENT FILING DATE: 2001-09-27
                                        APPLICANT: Ferrick, APPLICANT: Swift, S
                APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
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                                          Swift, Susan E.
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                          Armstrong, Randall
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ilarity 97.8%;
Conservative
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Methods and Compositions for Screening for Modulators and Ige
                                                            David A.
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Pred. No. 1.4e-49; 
O; Mismatches 5; Indels
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LENGTH: 5713
TYPE: DNA
ORGANISM: Artificial sequence
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Best Local S
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LENGTH: 6219
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   Matches
                  Best Local Similarity
                                 Query Match
                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Methods and Compositions for Screening TITLE OF INVENTION: Secretion and Switch Rearrangement FILE REFERENCE: A-66038-4/RMS/JJD/DLR
                                                                                                                                                                                                                                                                                                                         APPLICANT: Swift, Susan E.
APPLICANT: Armstrong, Randall
APPLICANT: Fox, Bryan
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PRIOR FILING DATE: 1998-05-12
NUMBER OF SEQ ID NOS: 19
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                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/966,976A
CURRENT FILING DATE: 2001-09-27
PRIOR APPLICATION NUMBER: US 09/076,624
PRIOR FILING DATE: 1998-05-12
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                                                                                                                                                                                SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Ferrick, David A.
                                                                                                ORGANISM: Artificial sequence FEATURE:
                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION:
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                                                                                  OTHER INFORMATION: synthetic
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   Conservative
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                46.1%;
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Pred. No. 1.4e-49;
0; Mismatches 5,
Score 256; DB 9; 1
Pred. No. 1.5e-49;
"""" tches 5;
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                                   Length 6219;
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                    RESULT 11
US-09-897-006-13
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     Sequence 13,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Methods and Compositions for Screening for Modulators and Ige SyrTITLE OF INVENTION: Secretion and Switch Rearrangement FILE REFERENCE: A-66038-3/RMS/JOD/DLR CURRENT APPLICATION NUMBER: US/09/963,206B
CURRENT FILING DATE: 2001-09-25
PRIOR APPLICATION NUMBER: US 09/076,624
PRIOR FILING DATE: 1998-05-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Swift, Susan E.
APPLICANT: Armstrong, Randall
APPLICANT: Fox, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Ferrick,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENGTH: 6219
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Local Similarity 97.88;
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     Application US/09897006
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Pred. No. 1.5e-49;
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US-09-982-610-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. US20020146420A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17,
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CURRENT FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: 60/215,851
PRIOR FILING DATE: 2000-07-03
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TITLE OF INVENTION: Expression Vectors
FILE REFERENCE: GALA-06415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2000-07-03
NUMBER OF SEQ ID NOS: 36
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COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy
COMPUTER: 1BM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/982,610
FILING DATE: 17-Oct-2001
                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno
CITY: South San Francisco
STATE: California
COUNTRY: USA
                                                                                                                                                                                                                                                                    TITLE OF INVENTION: PROTEIN TYROSINE KINASE AGONIST ANTIBODIES NUMBER OF SEQUENCES: 45
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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                                                                                                                                             ZIP: 94080
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                                                                                                                                                                                                                                                                                                            Tsai, Siao Ping
Wood, William I.
                                                                                                                                                                                                                                                                                                                                              Matthews, William
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Goeddel, David
                                                                                                                                                                                                                                                                                                                                                                  Lee, James M.
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PRIOR APPLICATION DATA

CLASSIFICATION: <Unknown>

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LENGTH: 6827 base pairs
LENGTH: 6827 base pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
SEQUENCE DESCRIPTION: SEQ ID NO: 17:
US-09-982-610-17
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US-09-872-733-15
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Best Local Similarity 97.8
270; Conservative
                                                                                                                  SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 15
LENGTH: 6978
                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. US20010036655Al GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15,
OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: of construct CMVkan/R-R-SIVgpl60 CT-09-872-733-15
                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/872,733
CURRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: PCT/US00/34985
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/173,036
                                                                                                                                                                                                                                                                                                                       APPLICANT: The Government of the United States of America, as TITLE OF INVENTION: MOLECULAR CLONES WITH MUTATED HIV GAG/POL, TITLE OF INVENTION: SIV ENV GENES
FILE REFERENCE: 2026-4287US1 HIV GAG/POL, SIV GAG & ENV
                                                                                                                                                                                 PRIOR FILING DATE: 1999-12-23
NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 17:
                                                                             ORGANISM: Artificial Sequence
                                                                                                      TYPE: DNA
                                                              FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGGGTTCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 40,378
REFERENCE/DOCKET NUMBER: P0821P3PCT
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 08/446,648
FILING DATE: 1996-MAY-23
APPLICATION NUMBER: 08/222616
FILING DATE: 04-APR-1994
ATTORNEY/AGENY INFORMATION:
NAME: Lee, Wendy M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA 181
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TELEFAX: 415/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 910/371-7168
                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/09872733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46.18; 97.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 256; DB 10;
Pred. No. 1.5e-49;
0; Mismatches 5;
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                      CTE
                                     DNA sequence
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US-10-001-189-45
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Best Local Similarity 97.8
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 45
LENGTH: 6984
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                                                                                                                                                                                                                                            Matches 270;
                                                                                                                                                                                                                                                                            Query Match
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APPLICANT: BEAM, TERESA
APPLICANT: BEAM, TERESA
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TRANSPOSITION USING
TITLE OF INVENTION: MINIMAL SEGMENTS OF THE EUKARYOTIC TRANSFORMATION
TITLE OF INVENTION: VECTOR PIGGYBAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 835910-92098
CURRENT APPLICATION NUMBER: US/10/001,189
CURRENT FILING DATE: 2001-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 70 SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/244,677 PRIOR FILING DATE: 2000-10-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/244,984
PRIOR FILING DATE: 2000-11-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: FRASER JR., MALCOLM J.
                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
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182 TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA 240
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Local Similarity 97.88;
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                                                                                                                     GTTACATAACTTACGGTAAATTGGCCCGCCGGCCGGCCCAACGACCCCCGCCCATTG 121
                                                                                                                                                                     ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA 181
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                                   Conservative
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Pred. No. 1.5e-49;
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                                                                                                                                                                                                                                                        Score 256; DB 9;
Pred. No. 1.5e-49;
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US-08-786-531B-5
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REFERENCE/DOCKET NUMBER: hgtri
TELECOMMUNICATION INFORMATION:
TELEPHONE: 515-288-3667
TELEFAX: 515-288-1338
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                       Query Match 46.1%;
Best Local Similarity 97.8%;
Matches 270; Conservative
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HYPOTHETICAL: 1
ANTI-SENSE: NO
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PRIOR APPLICATION NUMBER: US 60/010371
FILING DATE: 22-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Nebel: Heidi S.
27 710
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                                  2933
                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                             2813 AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGC 2872
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Seregina, Tatlana
TITLE OF INVENTION: Vehicles for Stable Transfer of Green
TITLE OF INVENTION: Fluorescent Protein Gene and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                             242
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182 TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/0
FILING DATE: 21-JAN-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
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Wang, Suming
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                                                                                                                                                                                                                                                                                                                                      other nucleic acid
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Pred. No. 1.5e-49;
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Search completed: December 15, 2002, 08:34:42 Job time: 107 secs

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Maximum DB :
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Maximum Match 10
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1: /cgn2_6/ptodata/:
2: /cgn2_6/ptodata/:
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Gapop 10.0 , Gapext 1.0
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                                                                                                                                                                                                                                                 FILE REFERENCE: 4300.011800
CURRENT APPLICATION NUMBER: US/09/299,141
CURRENT FILING DATE: 1999-04-23
EARLIER APPLICATION NUMBER: 60/083,025
EARLIER FILING DATE: 1998-04-24
NUMBER OF SEQ ID NOS: 13
SOFTMARE: Patentin Ver. 2.0
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APPLICANT: MORGAN, MICHAEL
TITLE OF INVENTION: MATERIALS AND METHODS
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                                                                                                                                 SEQ ID NO 10
LENGTH: 6924
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Query Match
Best Local Similarity
Matches 543; Conserv
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                                                                                                                                                        APPLICANT: BYRNE, BARRY J.
APPLICANT: MORGAN, MICHAEL
TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
FILE REFERENCE: 4300.011800
CURRENT APPLICATION NUMBER: US/09/299,141
CURRENT FILING DATE: 1999-04-23
EARLIER FILING DATE: 1999-04-24
NUMBER OF SEQ ID NOS: 13
SOFTMARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                           APPLICANT: FLOTTE, TERE APPLICANT: SONG, SIHONG
                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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                                                                 Description of p43msENCB-AT
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74.9%;
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Score 325; DB 4;
Pred. No. 8.2e-63;
0; Mismatches 10
                                                                             Artificial Sequence:PLASMID
                          Length 6924;
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Conservative

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Indels

172;

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APPLICANT: FLOTTE, TERENCE R.

APPLICANT: SONG, SIHONG
APPLICANT: SONG, SIHONG
APPLICANT: BYRNE, BARRY J.

APPLICANT: HORGAN, MICHAEL
TITLE OF INVENTION: MATERIALS AND METHODS FO
FILE REFERENCE: 4300.011800
CURRENT APPLICATION NUMBER: US/09/299,141
CURRENT FILING DATE: 1999-04-23
EARLIER APPLICATION NUMBER: 60/083,025
EARLIER APPLICATION NUMBER: 60/083,025
ENABLIER FILING DATE: 1998-04-24
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PALENTIN Ver. 2.0
SEQ ID NO 11
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US-09-299-141-11
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                                                                                                                 Sequence 11, Application US/09299141
Patent No. 6461606
GENERAL INFORMATION:
ENGTH: 6924
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OTHER INFORMATION:
US-09-299-141-11
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Best Local :
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CGCGT 1257
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                                                           ATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC
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Similarity 74.9%;
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Pred. No. 8.2e-63;
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Sequence 1, Application US/08459493
Patent No. 6030638
GENERAL INFORMATION:
APPLICANT: Brigham, Kenneth
APPLICANT: Conary, Jon T.
APPLICANT: Conorico, Angelo
APPLICANT: Meyrick, Barbara

APPLICANT: Conary, Jon T.
APPLICANT: Canonico, Angelo
APPLICANT: Meyrick, Barbara
TITLE OF INVENTION: PLASMID

FOR

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EXPRESSION

US-08-459-493-1

APPLICANT:

Debs, Robert J.

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                                                                   RESULT 6
Sequence 2, Application US/08029022 Patent No. 5641662 GENERAL INFORMATION:
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NAME: Rohn Farmation:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 60606-4002
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 763 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ANTI-SENSE: NO
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REGISTRATION NUMBER: 30,955
REFERENCE/DOCKET NUMBER: VU9115
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
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100 S. Wacker Drive - Suite 960
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Pred. No. 7.7e-48;
0; Mismatches 5;
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US-08-029-022-4 ; Sequence 4, Application US/08029022 ; Patent No. 5641662

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Best Local Similarity 97.8%;
Matches 270; Conservative
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TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/
FILING DATE: 19930310
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 809,29
FILING DATE: 17 DEC 91
APPLICATION NUMBER: 972,13
FILING DATE: 05 NOV 92
APPLICATION NUMBER: PCT/US
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MEDIUM TYPE: 3.5" Diskette,
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STREET: Menlo Park
CITY: Menlo Park
CTATE: California
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TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
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CORRESPONDENCE ADDRESS:
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CURRENT APPLICATION DATA:
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OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: sing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 059
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TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA 240
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94025
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2200 Sand Hill Road, Suite 100
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SYSTEM: MS-DOS (Version 5.
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Pred. No. 7.9e-48;
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                RESULT 8
US-08-246-376-2
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Best Local :
Sequence
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TELEFAX: (415) 854-087
TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/029
FILING DATE: 19930310
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 809,291
FILING DATE: 17 DEC 91
APPLICATION NUMBER: 972,135
FILING DATE: 05 NOV 92
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REFERENCE/DOCKET NUMBER: 05935/008001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEPHONE: (415) 854-6275
TELERAX: (415) 854-0875
TELERAX: 200144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PS/2 Model 502 or 55SX OPERATING SYSTEM: MS-DOS (Version 5.0 SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
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ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
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STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
                                                                                                        AGTACGCCCCTAFTGACGTCAATGACGGTAAATGG 276
                                                                                                                                                           TGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCA
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Application US/08246376
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97.8%;
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Pred. No. 7.9e-48;
0; Mismatches 5
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: June 4, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Barbara Rae-Venter
REGISTRATION NUMBER: 32,7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 05
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: 07/99:
FILING DATE: December 17,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PS/2 Model 502 or 55SX OPERATING SYSTEM: MS-DOS (Version 5.0 SOFTWARE: WOTGHEAFFECT (Version 5.1) CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5° Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
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CORRESPONDENCE ADDRESS:
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 397
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FILING DATE: August 6,
APPLICATION NUMBER: 07/
FILING DATE: June 4, 19
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                           AGTACGCCCCCTATTGACGTCAATGACGGTAAATGG 276
                                                                     TGGGTGGAGTATTTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA 240
                                                                                                                              ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA 181
                                                                                                                                                                        GTTACATAACTTACGGTAAATTGGCCCGCCGGCTGACCGCCCAACGACCCCCCGCCCATTG 121
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er 17, 1992
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Pred. No. 7.9e-48;
0; Mismatches 5;
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RESULT 9 US-08-246-376-4

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RESULT 10
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/992,687
FILING DATE: December 17, 1992
APPLICATION NUMBER: 07/927,200
FILING DATE: August 6, 1992
APPLICATION NUMBER: 07/894,498
FILING DATE: June 4, 1992
APPLICATION NUMBER: 07/894,498
FILING DATE: June 4, 1992
APPLICATION NUMBER: 07/894,498
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PS/2 model 50Z or 55SX OPERATING SYSTEM: MS-DOS (Version 5.5) SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb

COMPUTER: IBM PS/2 Model 50Z or 55S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEPAX: (415) 854-0875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Ning Zhu TITLE OF INVENTION: TITLE OF INVENTION:
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STRANDEDNESS: singl
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 32,750
REFERENCE/DOCKET NUMBER: 05935/005US1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
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                                                                                                                                                 TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA 240
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                                                                                         AGTACGCCCCCTATTGACGTCAATGACGGTAAATGG 276
                                                                                                                              TGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCA 396
                                                        AGTACGCCCCCTATTGACGTCAATGACGGTAAATGG 432
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2200 Sand Hill Road, Suite 100
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                                                                                                                                                                                                                                                                                                                                           Query Match 46.18;
Best Local Similarity 97.88;
                                                                                                                                                                                                                                                                                                                             Matches
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FILING DATE: NO. 5858784ember 5, 1:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/809,291
FILING DATE: December 17, 1991
APPLICATION NUMBER:
FILING DATE:
FILING DATE:
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INFORMATION FOR SEQ ID NO:
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TITLE OF INVENTION:
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TITLE OF INVENTION:
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MEDIUM TYPE: 3.5" Diskette, 1.44
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (415) 854-5277
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                241
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                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 059
                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Barbara Rae-Venter REGISTRATION NUMBER: 32,
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STREET: Suite 100
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AGTACGCCCCCTATTGACGTCAATGACGGTAAATGG 276
                                                                  TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA 240
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Pred. No. 7.9e-48;
0; Mismatches 5;
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PILING DATA:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/809,291
APPLICATION NUMBER: 17, 1991
                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5° Diskette, 1.44
COMPUTER: IBM PS/2 Model 50z or
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               182 TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGÇAGTACATCAAGTGTATCATATGCCA 240
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                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
STRANDEDNESS: single
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REFERENCE/DOCKET NUMBER: 05935/007US1
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OPERATING SYSTEM:
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94025
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California
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DELIVERY
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US-08-256-004-2
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                                                                                                                                                                                              Query Match
                                                                                                                                                             Matches 270;
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                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 843-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: June 4, 1992
APPLICATION NUMBER: 07/80
FILING DATE: December 17,
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
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STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 07/972,135
FILING DATE: NO. 601644ember 5,
APPLICATION NUMBER: 07/927,200
FILING DATE: August 6, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: August
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Neeley, Richard REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: August 6, APPLICATION NUMBER: 07
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                                                                                                               2 AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGGAGTTCCGC 61
                                                                                                                                                                                Local Similarity
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                                                                                                                                                                                                                                                                                              LENGTH:
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ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA 181
                              TGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCA 396
                                                                                                                                                                                                                                                                           nucleic acid
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                                                                                                                                                               Conservative
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linear
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97.8%;
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                                                                                                                                                                             Score 256; DB 3; Pred. No. 7.9e-48;
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GENERAL INFORMATION:
                                                                                                                               Matches 270;
                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                      TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 94025
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: 3.5" Dodel 50Z or 55SX
COMPUTER: TEM PS/2 MOdel 50Z or 55SX
COMPUTER: MS-DOS (Version 5.0)
                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
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TELEFAX: (415) 854-0875
                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: December 17 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
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STREET: Suite 100
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                                                                  157
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                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/07/972,135 FILING DATE: No. 6468798ember 5, APPLICATION NUMBER: 07/809,291
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STATE: Californi
                                 STRANDEDNESS:
TOPOLOGY: 11r
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                                                                                                                                            Local Similarity
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                                                                                AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGC 61
   GTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCCAACGACCCCCCGCCCATTG 276
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                                                                AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGC 216
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                                                                                                                                                                                                                                        nucleic acid
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LUNG BY AEROSOL -
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                              Matches
                                                            Query Match
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                                                                                                                                                                                         TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 055
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEPAY. (415)
                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/07/972,135
FILING DATE: No. 6468798ember 5,
APPLICATION NUMBER: 07/809,291
FILING DATE: December 17, 1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PS/2 Model 502 or 55SX OPERATING SYSTEM: MS-DOS (Version 5.0) SOFTWARE: WORDPETFECT (Version 5.1) CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5" Di
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                       NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/006,841 FILING DATE:
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STREET: Suite 100
CITY: Menlo Park
                                           Local Similarity 97.88;
                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
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                                                                                                                           STRANDEDNESS:
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                                                                                                            TOPOLOGY: linear
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2 AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGC 61
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                              Conservative
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LUNG BY AEROSOL - AND
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                                           Score 256; DB 4;
Pred. No. 7.9e-48;
                              Mismatches
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                                                          DB 4; Length 930;
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62 GTTACATAACTTACGGTAAATTGGCCCGCCGGCTGACCGCCCAACGACCCCCCGCCCATTG 121

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PCT-US93-05366-2
                                                                                                                 Query Match
                                                                                      Matches
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TELEX: 200154
TELEX: 200150
NFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: 1BM PS/2 Model 502 or 55sx
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
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62 GTTACATAACTTACGGTAAATTGGCCCGCCGGCTGACCGCCCAACGACCCCCCGCCCATTG 121
                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                     Local Similarity 97.8 es 270; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 04-JUI CLASSIFICATION:
                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 059
                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 07/927,200 FILING DATE: August 6, 1992 APPLICATION NUMBER: 07/894,498
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                           2 AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGC 61
                                                                                                                                                                                                       LENGTH:
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                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER:
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2200 Sand Hill Road, Suite 100
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                                                                                                                                                                                                                                                                                                                                                                June 4, 1992
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                             TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA 240
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Search completed: December 15, 2002, 07:29:25
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ALIGNMENTS

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BQ757691 EBem10\_SQ AV681486 AV681486 BI823701 603040818 AV681527 AV681527 BQ248366 TAEZ5009H BQ247997 TAEZ55019D BQ248418 TAEZ5002F BQ248811 TAEZ5000F BQ248811 TAEZ5015B BQ247933 TAEZ5015B BQ247762 TAEZ5042H BQ247762 TAEZ5042H BQ247762 TAEZ5014H AV641472 AV681472 BQ247960 TAEZ5014 AV645389 AV645389 BQ247963 TAEZ5014 BQ247963 TAEZ5014 BQ247963 TAEZ5014 BQ247963 TAEZ5014 BQ247963 TAEZ5014

Location/Qualifiers	FEATURES
Laboratory of Genetics National Institute on Aging/National Institutes of Health 33 Cassell Drive, Suite 4000, Baltimore, MD 21224-6820, USA Email: cdna@lgsun.grc.nia.nih.gov This clone set has been freely distributed to the community. Please visit http://lgsun.grc.nia.nih.gov/cDNA/15k.html for details. Plate: H3006 row: C column: 07 Seq primer: -21M13 Forward High quality sequence stop: 569 POLYA-No.	·
Contact: George J. Kargul	COMMENT
Verification and initial annotation of NTA mouse 15K cDNA clone set Unpublished (2001)	TITLE JOURNAL
T.S., Carter, M.G. and KO, M.S.H.	
Kargul, G.J., Dudekula, D.B., Qian, Y., Lim, M.K., Jaradat, S.A., Tanake	AUTHORS
1 (bases 1 to 569)	REFERENCE
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutereoscomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.	
Mus musculus	ORGANISM
house mouse.	SOURCE
EST.	KEYWORDS
BG063359.1 GI:12545922	VERSION
H3006C07 3', mRNA sequence. BG063359	ACCESSION
H3006C07-3 NIA Mouse 15K cDNA Clone Set Mus musculus cDNA clone	DEFINITION
BG063359 569 bp mRNA linear EST 26-JAN-2001	LOCUS
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Result No.

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Query Match

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Description

SUMMARIES

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578 bp mRNA linear EST 26-AUG-199
EST03748 Mouse 7.5 dpc embryo ectoplacental cone cDNA library Mus
musculus cDNA clone C0039E08 3' similar to Cloning vector pCI-neo,
mammalian expression vector,, score = 2136, mRNA sequence.
AA409312
AA409312.1 GI:2068663
            Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus

1 (bases 1 to 578)
   Ko, M.S.H., Threat, T.A., Horton, J.H., Wang, X, Cui, Y.,
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/db_xref="niaEST:H3006C07-3"
/db_xref="taxon:10090"
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/sex="Clones arrayed from a variety of cDNA libraries"
/dev_stage="Clones arrayed from a variety of cDNA
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   Wang, X., Pryor
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Center for Molecular Medicine and Genetics
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ,E., Paris,J., Wells-Smith,J., Fujiwara,H., Yotsumoto,S. Nakashima,H.
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1 (bases 1 to 675)
                Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: msko@cmb.biosci.wayne.edu
                                                                numan .
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                                                                                                                            GLA Homo sapiens
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/dev_stage="embryonic day 7.5 pos
/lab_host="DH10B"
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/db_xref="ATCC (inhost):1364275"
/db_xref="taxon:10090"
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/strain="C57BL/6J"
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
            Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 642)

Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X., Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li,N., Du,J., Hu,W., Shen,K., Lu,G., Fu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X., Hu,G., Fu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X., Hu,G., Gu,J., Chen,Z., and Han,Z.
                                                                                                                                                                     AV645353 GLA Homo sapiens cDNA clone GLAAAD06
AV645333 GLA Homo sapiens cDNA clone GLAAAD06
AV645353 AV645353.1 GI:9866367
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This clone is available at CHGC in
Location/Qualifiers
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Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park,
201203, P. R. China
Tel: 86-21-50801919(ex.45)
                                                                                                                       Homo sapiens
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 Insight into hepatocellular carcinogenesis at transcriptome level
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/dev_stage="Adult"
/lab_host="SOLR"
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/db_xref="taxon:9606".
/clone="GLAAACO4"
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Contact: Zeguang Han
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AV681528
Xu,X., Huang,J., Xú,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X., Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li,N., Du,J., Hu,W., Shen,K., Lu,G., Fu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X., Hu,G., Gu,J., Chen,Z. and Han,Z.
Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver Proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
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                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 672)
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Fax: 86-21-50801922
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/dev_stage="Adult"
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/db_xref="taxon:9606"
/clone="GLAAAD06"
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                                                                                                     Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X., Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li,N., Du,J., Hu,W., Shen,K., Lu,G., Fu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X., Hu,G., Gu,J., Chen,Z. and Han,Z.
Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park,
201203, P. R. China
Tel: 86-21-50801919(ex.45)
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Pred. No. 9.1e-37;
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
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This clone is available
                                                                201203, P. R. China
Tel: 86-21-50801919(ex.45)
Fax: 86-21-50801922
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                                                                                                        Chinese National Human Genome Cent
351 Guo Shoujing Road, Zhangjiang
                                                                                                                                        Contact: Zeguang
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Xu, X., Huang, J., Xu, Z., Qian, B., Zhu, Z., Yan, Q., Cai, T., Zhang, X., Xiao, H., Qu, J., Liu, F., Huang, Q., Cheng, Z., Li, N., Du, J., Hu, W., Shen, K., Lu, G., Fu, G., Zhong, M., Xu, S., Gu, W., Huang, W., Zhao, X., Hu, G., Gu, J., Chen, Z. and Han, Z.
Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver Proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                                                                    Contact: Zeguang Han
Chinese National Human Genome Cent
351 Goo Shoujing Road, Zhangjiang
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86-21-50801922
                                                                                                                                    l: hanzg@chgc.sh.cn
clone is available at CHGC
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                                /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="GKAAAB12"
/clone_lib="GKA"
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/tissue_type-"hepatocellular carcinoma"
/dev_stage-"Adult"
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/tissue_type="hepatocellular carcinoma"
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                                                                              Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park,
201203, P. R. China
Tel: 86-21-50801919(ex.45)
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                                                                                                                                                                                        Email: hanzg@chgc.sh.cn
This clone is available at CHGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AV645377
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                                                                                                                                                                                                                                                                                        Contact: Zeguang Han
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                                                      /tissue_type="corresponding
/dev_stage="Adult"
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                                                                                                                               /organism="Homo sapiens"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                               was cloned directionally, not all sequences generated with reverse primer were from the 5' end (same with forward primer and 3' end). Average insert size is >870 bp Plate: 015 row: A column: 06 Seq primer: M13 Forward.
                                                                                                                                                                                                                                                                                                                                                                                            Unpublished (2002)
Contact: Dr. Sylvie Cloutier
Cereal Research Centre, Agriculture and Agri-food Canada
195 Dafoe Rd, Winnipeg, MB, Canada R3T 2M9
Tel: (204) 983-2340
Fax: (204) 983-4604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Triticum aestivum
Eukaryota; Viridiplantae; Stre
Spermatophyta; Magnollophyta;
; Triticeae; Triticum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cloutier,S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BQ247946 525 bp mRNA linear EST 03-MAY-2002 TaE25015A06F TaE25 Triticum aestivum cDNA clone TaE25015A06F, mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          functional genomics
                                                                                                                                                                                                                                                                                                                                                                              scloutier@em.agr.ca
                                                                           /tissue_type="developing seeds"
/dev_stage="25 days after anthesis"
/lab_host="E. coll DH10B"
/note="Vector: pCMV-SPORT6.0 (invitrogen Technologies);
Site_1: NotI; Site_2: MiuI; mRNA obtained from wheat see
of cultivar Glenhea 25 days post-anthesis"
113 c 133 g 139 t
                                                                                                                                                                                       /cultivar="Glenlea"
/db_xref="taxon:4565"
/clone="TaE25015A06F"
/clone_lib="TaE25"
                                                                                                                                                                                                                                                     /organism="Triticum aestivum"
                                                                                                                                                                                                                                                                                ocation/Qualifiers
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              35.9%;
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Pred. No. 2.9e
0; Mismatches
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Pred. No. 1.1e-34;
0; Mismatches 26;
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yta; Liliopsida; Poales; Poa
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                 .9e-33;
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Matches 210
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121 GACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGGACTTTCCCATTGACGTCA 180
                                                  123
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                                                  CGTGACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATT 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCCCCCTATTGACGTCAATGACGGTAAATGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGG
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                                                                                  CGTTACATAACTTACGGTAAATTGGCCCGCCGGCTGACCGCCCAACGACCCCCCGCCCATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCCCCCTATTGACGTCAATGACGGTAAATGG
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                                                                                                                                                                                                                                                                                                                                                                                             709 Swedeland Road,
Tel: 610-270-7245
Fax: 610-270-5598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequenced tags (ESTs) each from adult human osteoarthritic cartilage cDNA libraries Osteoarthr. Cartil. 9 (7), 641-653 (2001)
                                                                                                                                                                                                                                                                                                                                                            Email: sanjay_kumar-l@gsk.com
Seq primer: T7.
                                                                                                                                                                                                                                                                                                                                                                                                                                               GlaxoSmithKline
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Sanjay Kumar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kumar,S., Connor,J.R., Dodds,R.A., Halsey,W.,
Sathe,G., Mui,P., Agarwal,P., Badger,A.M., Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA sequence.
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Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                 Conservative
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                                                                                                                                                                                               /note="Vector: pSPORT I; Site_1:
Directional"
114 c 97 g 90 t
                                                                                                                                                                                                                                             /tissue_type="cartilage"
/lab_host="E.coli DH10 B
                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="HOA (Human Osteoarthritic Cartilage)"
                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                               35.2%;
96.8%;
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(Human Osteoarthritic Ca)
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                                                                                                               0;
                                                                                                                               Score 195.4;
Pred. No. 1.9
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                                                                                                                                              Length 401;
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                                                                                                                                                     62
                                                                                                                                                                                             2 AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCÄTATATGGAGTTCCGC
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                                                                           ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA 181
                                                                                                                       TTACATACTTACNNGGTAAATGGCCCGCTGGCTTGACCGCCAACGGACCNCNGCCCATTG
                                                                                                                                      GTTACATAACTTACGGTAAATTGGCCCGCCGGCTGACCGCCCAACGACCCCCCCGCCATTG
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                                                                                                                                                                                                                                              229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, 201203, P. R. China Tel: 86-21-50801919(ex.45)
Fax: 86-21-50801922
Email: harrosa
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AV681519
AV681519
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: hanzg@chgc.sh.cn
This clone is available at CHGC in Shanghai.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Zeguang Han
Chinese National Hum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xu,X., Huang,J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 821)
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/dev_stage="Adult"
/lab_host="SOLR"
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/db_xref="taxon:9606"
/clone="GKAAAG03"
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Liu,F., Huang,Q., Cheng,Z., Li.N., Du,J., Hu,W.,
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Pred. No. 2.1e-
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AV681464
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chinese National Human Genome Center at Shanghai 351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, 201203, P. R. China Tel: 86-21-50801919(ex.45)
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                                                                                                                                                                                                                                                                                                                                        Similarity
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This clone is available at CHGC
Location/Qualifiers
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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XhoI"
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/dev_stage="Adult"
/lab_host="50LR"
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ne GKAAAG10 5', mRNA sequence.
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AV681510 AV681510
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
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Chinese National Human Gen
Tel: 86-21-50801919(ex.45)
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Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/dev_stage="Adult"
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/db_xref="taxon:9606"
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Pred. No. 9.2e-32;
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Search completed: December Job time: 2431 secs

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                               260 TCAATGACGGTAAATGG 276
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TCAATGACGGTAAATGG 416
                                                                     AAACTGCNCACTTGNCAGTACATCAAGTGTATCATATGCAAAGTACGCCCCCTATTGACG
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Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
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Tel: 86-21-50801919(ex.45)
Fax: 86-21-50801922
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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clone is available at CHGC
Location/Qualifiers
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/dev_stage="Adult"
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/db_xref="taxon:9606"
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Gapop 10.0 , Gapext 1.0
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Copyright (c) 1993 - 2002 Compugen Ltd.
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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## ALIGNMENTS

AUTHORS TITLE JOURNAL	REFERENCE	ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	LOCUS	E51988	RESULT 1
Rubomura, M. and Salto, S. Promoter, recombinant containing the s Patent: JP 2001000188-A 3 09-JAN-2001; NIPPON ZEON CORP	artificial sequences. 1 (bases 1 to 561)	synthetic construct	synthetic construct.	JP 2001000188-A/3.	E51988.1 GI:18629549	E51988	Promoter, r	E51988		
Kubomura,M. and Salto,S. Rubomoter, recombinant containing the same and utilization thereof Patent: Jp 2001000188-A 3 09-JAN-2001; NIPPON ZEON CORP	sequences. to 561)	onstruct	onstruct.	88-A/3.	I:18629549		Promoter, recombinant containing the same and utilization thereof.			
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                                    Cloning vector pTurbo-Cre, AF334827
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C07K14/165,C07K14/30,C12N7/00,C12N15/00
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C12N15/09, A61K31/00, A61K31/00, A61K39/02, A61K39/17, A61K39/215,
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          vector pTurbo-Cre
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Location/Qualifiers
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156 c 191 g
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                             GI:12965137
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                                                               ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA
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artificial sequences; vectors.
1 (bases 1 to 5894)
1 (Lu,2.H., Graubert,T.A. and Ley,T.J.
Direct Submission
Submitted (10-JAN-2001) Division of Oncology, Section of Stem Cell
Biology, Washington University School of Medicine, 660 South Euclid
Avenue, Campus Box 8007, St. Louis, MO 63110-1093, USA
Location/Qualifiers
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BRALSLGVTKLVERWISVSGVADDPNNYLFCRVKKNGVAAPSATSQLSTRALEGIFEAT
HRLIYGAKDDSGQKYLAWSGHSARVGAARDMARAGVSIPEIMQAGGWTNVNIVMNYIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="rabbit beta-globin" complement(4885...5745) /note="Amp resistance"
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647. .1619
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YSPVTEKHLTDGMTVRELCSSAITMSDNTAANLLLTTIGGPKELTAFLENMGDEVTRL
DRWEPELNERIPNDERDTTMVPVMATTLRKLLTGELLTLASRQQLIDMMEADKVAFPL
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/protein_id="AAK11473.1"
/db_xref="GI:12965139"
/translation="MSIQHERVALIPEFAAFCLPVFAHPETLYKVKDAEDQLGARVGY
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/codon_start=1
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Patent: WO 0128321-A 2 26-APR-2001;
JAPAN SCIENCE AND TECHNOLOGY CORP, FUMITOSHI ISHINO,NAOKI MIYOSHI,
TOMOKO ISHINO,MINESUKE YOKOYAMA,SHIGEHARU WAKANA
OS Artificial Sequence
PN WO 0128321-A/2
PD 26-APR-2001
PD 26-APR-2001
PD 18-AUG-2000 WO 2000JP005546
PR 20-OCT-1999 JP 99P 298273
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/organism="synthetic construct"
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G01N33/15
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FUMITOSHI ISHINO, NAOKI MIYOSHI, TOMOKO ISHINO, MINESUKE
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                                                       ATGACCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC
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                                                                                                                      AGTACGCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTAC 437
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/db_xref="taxon:32630"
/organism="synthetic c'
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/organism-"Artificial
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                                       -- ATGCAGTATTTTGTGCAGCGATGGGGGC--GGGGGGG
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Deltagen, Inc. (US)
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/db_xref="taxon:32630"
/note="Construct Sequence"
1357 c 1475 g 1144 t
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Pred. No. 1.8e-51;
0; Mismatches 11;
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Ax468470
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                                                                                                                                                                                                                                                                                                                                                                                       AX468470.1 GI:21901306
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/db_xref="taxon:32630"
/note="Construct Sequence"
1593 c 1770 g 1431 t
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Pred. No. 1.8e-51;
0; Mismatches 11;
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80	BASE CO	FEAJ	٠.	COMPANY	J. 11	REFE	VERSION KEYWORD SOURCE ORGAN	E51990 LOCUS DEFINI	Db 3	Qy	Db .	OV V	Оy	Db	₹ .	Оу	Db	Qy ,	DЬ	Qy	рb	Qy	Db.
uery Match Best Local	COUNT	FEATURES Source		EAL	TITLE JOURNAL	REFERENCE	VERSION KEYWORDS SOURCE ORGANISM	ISI O	232	552		492	432 · 3115 ·		773	312 ( 2995 (	2935	277	2875	277	2815	277 -	2755 i
tch 46.3%; Score 257; DB 6; Length 599; al Similarity 97.8%; Pred. No. 4.5e-41;	/organism="Human herpesvirus 5" /db_xref="taxon:10359" 152 a 144 c 144 g 159 t	FT source 1. 599 FT source /organism='Cytomeg Location/Qualifiers 1. 599	YUMI KUBOMURA, SHUJI SAITO 2N15/09, A61K31/00, A61K31/00, A61K 7K14/125, 7K14/165,C07K14/30,C12N7/00,C12N	PN JP 200100188-A/5 PD 09-JAN-2001 PF 22-JUN-1999 JP 1999174804 PR PR PR 2-JUN-1999 JP 1999174804	r, recombinant JP 2001000188- ZEON CORP	Viruses; dsDNA viruses, no RNA stage; Herpesviridae; Betaherpesvirinae; Cytomegalovirus. 1 (bases 1 to 599) Kubomura M and Saito S	GI:18629551 )0188-A/5. )pesvirus 5. rpesvirus 5	E51990 599 bp DNA linear PAT 13-AUG-2002 Promoter, recombinant containing the same and utilization thereof. E51990	CGT 3234	CGT 554	TTCGCCCGTGCCCCGCTCCG-CGCCGCCTCGCCCCGCCC	TTCGCCCCGTGCCCCGCTCCGCCGCCGCCTCGCCCCCCCGGCTCTGACTGA	GGCGGCGGCCCTATAAAAAGCGAAGCGCGCGGGGGGGGGG	GIGCGCCGCAGCCAATCAGAGCGGCGCGCCTCCGAAAGTITCCTITTATGGCGAGGCGGC 3114	THE CHARGE ARCE ARE CARRECTED FOR THE CONTROL AND THE CONTROL AND THE CONTROL ARCE TO THE CONTROL ARCE OF	geggecececcageceggeceggèceggecagecgagecg	CCCAATTTTGTATTTATTTTAATTATTTTTGTGCACGATGGGGGGGG	ATGCAGTATTTTGTGCAGCGATGGGGGCGGGGGGG 311	ATGGTTCGAGGTGAGCCCCACGTTCTGCTTCACTCTCCCCATCTCCCCCCCC	276	ATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC 2874	276	AGTACGCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTAC 2814

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Signal
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Hawkins,R. and Nakamura,M.
Signal peptide
Patent: JP 2000354490-A 3 26-DEC-2000;
TOYOTA MOTOR CORP
                                                                                                                                                                                                                                                                                                                                                                               unidentified
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                                                                                                                                                                                                                                             RICHARD HAWKINS, MICHI NAKAMURA
C12N15/09,C07K14/61,C12N1/13,C12P21/02,C12N15/00
Key Location/Qualifiers
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Location/Qualifiers
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                 Sequence
105430
105430.1
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Query Match
Best Local Similarity
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182 TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA
                                                                                                                                          122 ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCCATTGACGTCAÀ 181
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                                                                                                                            ACGTCAATAATGACGTATGTTCCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA
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PN JP 2000308497-A/3
PD 07-NOV-2000
PF 17-APR-2000 JP 2000115248
PR 12-SEP-1986 US 907185
CORNELLIA MAXIN GOMAN
PC C12N15/09/C12N5/10,C12N15/0
PC C12N15/09/C12N5/10,C12N15/0
PC T1 Source 1.773
FT Source 1.773
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                                                                 TGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCA
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JP 2000308497-A/3.
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Location/Qualifiers
1. 777
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/db_xref="taxon:32644"
205 c 190 g 19
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777 bp EP 0260148

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PAT 02-DEC-1994

GI:591075 from Patent

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Matches 270;
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                  ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGÂCTTTCCATTGACGTCAA 181
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                                     tch 46:18; al Similarity 97.88; 270; Conservative
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                                                                                                                                                                                                                                                 Unknown
                                                                                                                                                                                                                                                                                      Sequence 3 from Patent 108105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: EP 0260148-A2 16 16-MAR-1988;
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                                                                                                                       Similarity
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205 c 190 g
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205 c 190 g
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97.8%;
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Pred. No. 7e-41;
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BASE COUNT
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Best Local Similarity
Matches 270; Conserv
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PN JP 2000308497-A/1
PD 07-NOV-2000
PF 17-APR-2000 JP 2000115248
PR 12-SEP-1986 US 907185,09-JUL-1987 US
CORNELLIA MAXIN GOMAN
PC C12N15/09,C12N5/10,C12N15/00,C12N5/00
CC L12N15/09,C12N5/10,C12N15/00,Unalifiers
FT source 1.919
FT cyganism-'Unidentified'.
                                                                   TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA 240
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           I05393
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nilarity 97.8%;
Conservative
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Location/Qualifiers
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/db_xref="taxon:32644"
245 c 222 g 23
919 bp
Patent EP 0260148.
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Pred. No. 7e-41;
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DEFINITION

Sequence 14 I05393

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Matches 270; Conserv
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                                    AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGC
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GTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCCCGCCCATTG
                  GTTACATAACTTACGGTAAATTGGCCCGCCGGCTGACCGCCCAACGACCCCCCGCCCATTG
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108103.1
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                                                                                                                                                     A transient expression system for producing Patent: EP 0309237-Al 1 29-MAR-1989; Location/Qualifiers
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Sequence 2 1
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AR028792.1
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Debs,R.James. and Zhu,N.
Debs,R.James. and Zhu,N.
Expression of cloned genes in the luliposome-based delivery
Patent: US 5858784-A 2 12-JAN-1999;
Patent: Location/Qualifiers
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Maximum DB seq length: 2000000000
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Listing first 45 summaries
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/SIDS2/gcgdata/geneseq/geneseqn-embl/NA2001B.DAT:*
/SIDS2/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                      /SIDS2/gcgdata/geneseq/geneseqn-emb1/NA2000.DAT:
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AAZ 45930
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AAL 43172
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AAF26076	AAV33626	AAH24427	AAA53849	AAD09612	AAD09426	AAT01113	AAQ74206	AAA53848	AAD28307	AAD28268	AAD28306	AAD28267	AAF26077	AAH26327	ABA91505	AAF26078	AAQ76041	AAV00669	AAV21771	AAT01115	AAT01112	AAQ74211	AAN91042	AAL38391	AAT77193	AAQ43524	AAQ53550	AAN90695	AAN90697	AAZ95643	AAH24425 ·	AAX15163	AAF84456	AAL43173	ABK49520
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Feline IL-12p40 en	Plasmid pBK-CMV DN	pBKCMV phagemid.	Vector pTGFG82. S	Vaccine vector V1J	Vaccine vector V1J	Expression vector	Expression vector		Ø		Cytomegalovirus (C		Feline IL-12p35 en	Adenovirus helper	Vector plasmid pGV	Feline IL-16 encod	Retrovirus vector	Synthetic hepatiti	VIR vaccination ve	Expression vector	CMVintA-GBH termin	CMVintA promoter a	Promoter-enhancer	Wild-type human AD	w	e	V (AD169) maj	DNA sequence of po	DNA sequence of po	Cytomegalovirus de	Cauliflower mosaic	u	Cytomegalovirus (C		Positive selection

## ALIGNMENTS

RESULT 1 AAF84454

AAF84454 standard; DNA; 561 BP

AAF84454;

25-JUN-2001 (first entry)

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Chimeric - Human cytomegalovirus.
Chimeric - Gallus gallus.
                                                                                                                                                                                            Pec promoter; chimeric promoter; chicken beta-actin promoter 5' fragment; cytomegalovirus; CMV; immediate-early; IE promoter fragment; recombinant vector; genetic vaccine; gene therapy; ds.
                                                                                                                                                                                                                                        Chimeric CMV IE/chicken beta-actin promoter, Pec.
      09-JAN-2001.
                                                                                                                                  Кeу
                           JP2001000188-A.
                                                                               promoter
                                                                                                                        promoter
                                                                                                                                                       Synthetic.
                                             /organism= "Chicken"
/note= "Beta-actin promoter 5' fragment"
                                                                               281..483
                                                                                                            /*tag=
                                                                                                                                  Location/Qualifiers
                                                                                       organism= "Cytomegalovirus (CMV)"
note= "Immediate-early (IE) promo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 11; 15pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 561 BP; 109 A; 156 C; 191
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                      TCTGACTGACCGCGTC 555
                                            CTGCGCGCTGCCTTCGCCCGTGCCCGCCTCCGCCGCCTCGCCCCGCCCCCGCC
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RESULT 2
AAZ45930
ID AAZ4

AAZ45930 standard; DNA;

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122 383 62

181 442 121 382 61

443

Query Match Best Local S Matches

h 58.6%; Similarity 74.9%;

Score 325; DB 2 Pred. No. 2e-57; Mismatches

DB 21; 10;

Length 6714; Indels

172;

Gaps

4

543;

Conservative

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323

2 AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGC

AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGC

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The present sequence represents a recombinant viral vector, designated CC p43cB-AT, which encodes human alpha-1-antitrypsin protein, and which contains the CMV enhancer, and chicken beta-actin promoter sequences. The vector is exemplary of the vectors of the invention which comprise a polynucleotide encoding a protein, and are used for gene therapy to correct genetic disorders related to expression of a protein of interest. The vectors of the invention are based on Adeno asocciated virus (AAV). The vectors comprise AAV inverted terminal repeats and constitutive or regulatable promoters for driving high levels of gene expression. CC vectors encoding alpha-1-antitrypsin protein or a biologically active fragment or variant are administered to mammalian cells (preferably myofibers, myoblasts, hepatocytes or lung cells) for treating calpha-1-antitrypsin deficiency or ameliorating a condition resulting from a defective protein. The vectors can also be useful for genetic therapy of other conditions such as hemophilia, adenosine deaminase cells concer, immunodeficiency diseases and bacterial or viral infections by the infusion of protein or a cytokine such as interleukin-2.
                                                                                                                                                                                                                                                                                                                                                                                           Recombinant viral vector useful in the gene therapy of alpha-1-antitrypsin deficiency and also in hemophilia and diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Viral vector; p43CB-AT; alpha-1-antitrypsin; gene the Alpha-1-antitrypsin deficiency; haemophilia; neurol, adenosine demainase deficiency; autoimmune disease; immunodeficiency disease; infection; cytokine; circu
                                                                                                                                                                                                                                                                                                                                                             Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
Cauliflower mosaic virus
Sequence 6714 BP; 1452 A; 1821 C; 1886 G; 1555 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-147020/13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYFL ) UNIV FLORIDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sp.
                                                                                                                                                                                                                                                                                                                                                           Fig 20A-C; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Song S,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             circular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nerapy; diabetes;
ogical disorder;
interleukin-2;
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RESULT 3
AAZ45934
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                                                                                                                                                                                                                            1043
                                                                                                                  Viral vector; p43msENCB-AT; alpha-1-antitrypsin; gene therapy; diabetes; alpha-1-antitrypsin deficiency; haemophilia; neurological disorder; adenosine deaminase deficiency; autoimmune disease; interleukin-2; immunodeficiency disease; infection; cytokine; circular; cancer; ss.
          (UYFL ) UNIV
                        24-APR-1998;
                                     23-APR-1999;
                                                              W09955564-A1
                                                                                  Homo sapiens.
Cauliflower mosaic virus
                                                                                                      Synthetic.
                                                                                                                                                    Nucleotide sequence
                                                                                                                                                                 25-APR-2000
                                                                                                                                                                                          AAZ45934 standard;
                                                                                                Adeno
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                                                                                                                                                                                                                                         CGCGT 554
                                                                                                                                                                                                                                                                                             ATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC
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                                                                                                                                                                                                                                                                                 associated
           FLORIDA
                                                                                                                                                                (first
                        98US-0083025
                                     99WO-US08921.
                                                                                               virus.
                                                                                                                                                                                           DNA;
                                                                                                                                                   of the
                                                                                                                                                                entry)
                                                                                                                                                                                           6924
                                                                                                                                                                                                                                                                                                                                                                            -ATGCAGTATTTTGTGCAGCGATGGGGGC---
                                                                                                                                                   vector p43msENCB-AT
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CC p43msENCB-AT, which encodes human alpha-1-antitrypsin protein, and contains the CMV enhancer, and chicken beta-actin promoter contains the CMV enhancer squeence upstream of the CMV promoter. CC sequences, and has an enhancer sequence upstream of the CMV promoter. CC rise vector is exemplary of the vectors of the invention which comprise concerns the invention are based on a protein of interest. CC correct genetic disorders related to expression of a protein of interest. CC rise vectors of the invention are based on Adeno associated virus (AAV). CC regulatable promoters for driving high levels of gene expression. CC vectors encoding alpha-1-antitrypsin protein or a biologically active crapment or variant are administered to mammalian cells (preferably CC myofibers, myoblasts, hepatocytes or lung cells) for treating cc alpha-1-antitrypsin deficiency or ameliorating a condition resulting conditions such as hemophilia, adenosine deaminase condition conditions such as hemophilia, adenosine deaminase condition.
                                        deficiency, diabetes, cancer, autoimmune diseases, neurological disorders, immunodeficiency diseases and bacterial or viral infections by the infusion of protein or a cytokine such as interleukin-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence represents a recombinant viral vector, p43 \text{msENCB-AT}, which encodes human alpha-1-antitrypsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Recombinant viral vector useful in the gene therapy of alpha-1-antitrypsin deficiency and also in hemophilia and
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Sequence 6924 BP;
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1504 A; 1866 C; 1951 G; 1603 T;
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0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diabetes
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Ş Ş 밁 밁 Ş S 문 Š 문 Ş 밁 Q. 밁 ₽ Qγ δÃ 밁 Matches Query Match Best Local Similarity 533 713 653 122 593 311 953 833 773 241 277 893 277 277 182 62 N AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGC AGTACGCCCCTATTGACGTCAATGACGGTAAATGG-----TGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCA TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA ACGTCAATAATGACGTATGTTCCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA ACGTCAATAATGACGTATGTTCCCCATAGTAACGCCAATAGGGACTTTCCCATTGACGTCAA 181 GGGGGGCGCGCCCAGGCCGGGCGGGCGGGGCGAGGCGGGGCGGGGCGAGGCGGAGA ATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC AGTICCGCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCCAGTAC 543; Conservative 58.6%; ----ATGCAGTATTTGTGCAGCGATGGGGGC----0; Score 325; DB 21; Pred. No. 2e-57; 0; Mismatches 10; 10; Length Indels 172; 6924; -GGGGG : Gaps 1012 310 370 952 892 276 772 240 712 652 121 592 61 276 276

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371

GGTGCGGCGGCAGCCAATCAGAGCGGCGCGCTCCGAAAGTTTCCTTTTATGGCGAGGCGG

430 1072

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RESULT 4
AAZ45935
                   a polynucleotide encoding a protein, and are used for gene therapy to correct genetic disorders related to expression of a protein of interest. The vectors of the invention are based on Adeno associated virus (AAV). The vectors comprise AAV inverted terminal repeats and constitutive or regulatable promoters for driving high levels of gene expression. Vectors encoding alpha-1-antitrypsin protein or a biologically active fragment or variant are administered to mammalian cells (preferably myofibers, myoblasts, hepatocytes or lung cells) for treating alpha-1-antitrypsin deficiency or ameliorating a condition resulting alpha-1-antitrypsin deficiency or ameliorating a condition resulting alpha-1-antitrypsin deficiency or smelliorating a condition resulting from a defective protein. The vectors can also be useful for genetic therapy of other conditions such as hemophilia, adenosine deaminase
                                                                                                                                                                                                                                                                                                                                                                 The present sequence represents a recombinant viral vector, designated p43rmsENCB-AT, which encodes human alpha-1-antitrypsin protein, and which contains the CMV enhancer, and chicken beta-actin promoter sequences, and has an enhancer sequence upstream of the CMV promoter in the opposite direction to the enhancer of vector p43msENCB-AT. The vector is exemplary of the vectors of the invention which comprise
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Cauliflower mosaic virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Recombinant viral vector useful in alpha-1-antitrypsin deficiency and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Flotte TR,
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cancer,
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autoimmune
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene therapy of o in hemophilia and diabetes
diseases, neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     circular; cancer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disorders, immunodeficiency diseases and bacterial or viral infections by the infusion of protein or a cytokine such as interleukin-2.
                                                                                                                                                                                                   1133
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Mouse; Meg1/Grb10;
                   Mouse
                                     15-AUG-2001
                                                        AAH21793
                                                                          AAH21793 standard;
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                                                                                                                                                                                                            GGTGCGGCGGCAGCCAATCAGAGCCGCGCGCCCCCGAAAGTTTCCTTTTATGGCGAGGCGG
                                                                                                                                                                                                                                                                                                                 TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA
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                                                                                                                                                                                                                                                                                                                                                       ATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTACGCCCCTATTGACGTCAATGACGGTAAATGG------
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                    (first entry)
                   nucleotide
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                                                                          CDNA;
diabetes;
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                   sequence
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transgene;
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No. 2e-57;
                   SEQ
transgenic
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                   NO: 3
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animal;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                             The present invention describes a transgenic non-human mammal containing the Megl/Grbl0 gene. Also described are: (1) a transgenic non human mammal with human GRB10 gene; (2) a method for producing a transgenic mouse; (3) method (M1) for screening for drugs for treating diabetes; and (4) drugs found using (M1). The transgenic non-human mammal is useful for screening for new drugs to treat diabetes. The transgenic animals are models for the onset of diabetes, and may be useful in discovering the mechanism for the onset of diabetes caused by inhibition of insulin signal transduction, and for developing new treatments. The present sequence represents a specifically claimed transgene comprising the mouse Megl/Grbl0 nucleotide sequence downstream of the chicken beta-actin promoter and upstream of rabbit beta-globin polyA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Transgenic non-human as a model for onset
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 5; Page 32-33;
                                                                                                                                                                                                                                                                                                                                        Sequence 4211 BP; 890 A; 1139 C; 1230 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-AUG-2000;
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438
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ATGACCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC
                                                                                                                                             ACGTCAATAATGACGTATGTTCCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA
                                                                                                                                                                                            539;
                                              AGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCCAGTAC
                                                                        AGTACGCCCCCTATTGACGTCAATGACGGTAAATGG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         F, Miyoshi N,
                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                           Conservative
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1862..3652
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                                                                                                                                                                                                                                                                                                    55.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mammal with Meg1/Grb10 or human GRB 10 gene useful of diabetes and for screening new diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         50pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ishino T,
                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                         Score 309.4; DB 2
Pred. No. 2.9e-54;
0; Mismatches 11
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                                                                                                                                                                                                                                                                                                                                          952 T; 0 other;
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                                                                                                                                                                                                                                                                                                                 Length 4211;
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                 The invention comprises a method for regulating the activity of an expression product of a gene transferred into a living body. The met involves the coexistence of a protein interfering with the activity the expression product. The method of the invention is useful for regulating the activity of an expression product. The present rat DN sequence was used in an example of the invention.
                                                                                                          Regulating activity of expression product of gene transferred into living body by coexistence of interfering substance e.g. expression product receptor, given through skin to express and reduce excessive
                                                                                Example 1; Page 35-39; 49pp; Japanese.
                                                                                                   activity
                                                                                                                                                 WPI; 2002-471702/50
                                                                                                                                                                  Maruyama H,
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                                                                                                                                                                                                              24-NOV-2000; 2000JP-0358389
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MARUYAMA H.
                                                                                                                                                                 Miyazaki J,
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                                                                                                                                                                                                                                                                                                                           activity
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                                                                                                                                                                   Sugawa
                                                                                                                                                                                                                                                                                                        product activity regulation
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                                                                                                                                                                  Higuchi
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Sequence

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1336 T; 0 other;

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RESULT 7
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AC AAL4
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Best Local Similarity 74.6
Matches 539; Conservative
                                                        Human
                                                                                                              AAL43171 standard; DNA; 5565
                   Homo sapiens
                                     Human;
                                                                          16-AUG-2002
 WO200241922-A1
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                                                                                                                                                             CGT 740
                                                                                                                                                                               CGT 554
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                                                      expression product activity regulation method-related
                                     ds;
                                     expression
                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                  -----ATGCAGTATTTTGTGCAGCGATGGGGGC--GGGGGGG
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention comprises a method for regulating the activity of an expression product of a gene transferred into a living body. The method involves the coexistence of a protein interfering with the activity of the expression product. The method of the invention is useful for regulating the activity of an expression product. The present human DN/sequence was used in an example of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Regulating activity of expression product of gene transferred into living body by coexistence of interfering substance e.g. expression product receptor, given through skin to express and reduce excession
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 32-35; 49pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Maruyama H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-NOV-2000; 2000JP-0358389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CHUS ) CHUGAI SEIYAKU
(MARU/) MARUYAMA H.
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                                                                                                                                                                                                                                     ACGTCAATAATGACGTATGTTCCCCATAGTAACGCCCAATAGGGACTTTCCCATTGACGTCAA 181
                                                                                                                                                                                                                                                                                                                   GTTACATAACTTACGGTAAATTGGCCCGCCGGCCGACCGCCCAACGACCCCCCGCCCATTG
                  GTGCGGCGGCAGCCAATCAGAGCGGCGCGCGCTCCGAAAGTTTCCTTTTATGGCGAGGCGGC
                                               AGTACGCCCCTATTGACGTCAATGACGGTAAATGG-----
                                      ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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74.6%;
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Pred. No. 2.9e-54;
0; Mismatches 11;
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                                                                                                                                                                                                                                                                                         This invention relates to a transgenic (non-human) mammal in which contracellular calcium ion concentration can be monitored. The mammal contraction but he encoding a foreign reporter protein which is expressed in contains DNA encoding a foreign reporter protein which is expressed in contains DNA encoding a foreign reporter protein which is expressed in contains DNA encoding a foreign reporter contains of the transgenic animals. The DNA used to transform the animal comprises contained the transgenic animals. The DNA used to transform the animal comprises contained by two types of promoter and loxe. The transferase (hprt) contained the present of promoter and loxe. The transferase (hprt) contained in useful for determining and evaluating physiological activity of content of the present organs, and for the pharmacological evaluation contained the pharmacological evaluation concentrations in other disease models and for screening for substances concentrations in other disease models and for screening for substances concentrations in other disease models and for screening for substances concentrations in other disease models and for screening for substances concentrations in other disease models and for screening for substances constitute used in the formation of the transgenic animal.

The sequence construct used in the formation of the transgenic animal.

CC sequences and fragments of DNA containing loxp.
                                                                                                                      Query Match
Best Local S
Matches 539
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Transgenic non-human mammal for monitoring concentration -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-343542/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mori K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (KYOW ) KYOWA HAKKO KOGYO KK
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                                                                                                                                                                                                                                               Sequence
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                                                                                                                                                                                                                                            1307 A; 1252 C; 1481 G;
                                                                                                                                               55.7%;
74.6%;
                                                                                                                      0
                                                                                                                                                  Score 309.4; DB 2
Pred. No. 2.9e-54;
                                                                                                                      Mismatches
                                                                                                                                                                                                                                            1541 T; 0 other;
                                                                                                                                                                               DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              intracellular calcium
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                                                                                                                                                                                                                                           Transgenic animal; targeting vector; positive selection vector; homologous recombination; target gene modification; transgenic c3408; ds.
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                                                                                                                                                                                                                                                                                                                                            Positive selection
                                                                                                                                                                                                                                                                                                                                                                                               15-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK49521 standard; DNA; 5759
                                                                                                 21-MAR-2002
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(C (I) capable of modifying a target gene. (I) comprises two sequences

(C (SI and S2) homologous to a portion or region of a target gene, a

(C selectable marker cassette and a regulator. (I) is useful for producing

(C cells comprising a modification of the target gene which involves

(C cells comprising a modification of the target gene which involves

(C introducing (I) into cells capable of homologous recombination, selecting

(C cells expressing the selectable marker and identifying cells

(C centaining the modification of the target gene. Use of (I) for enriching

(C cells comprising disruption or modification of target gene enhances

(C centaining the modification or modification of target gene enhances

(C centaining the modification or modification and specificity. Use of (I)

(C current case over previous technologies in both the speed and frequency at

(C cells comprising target gene modification. Also use of (I) provides an increase over previous technologies in both the speed and frequency at

(C current calons. This sequence represents the positive selection vector
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Best Local Similarity
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   GGGGGCGCGCGAGGCGGGCGGGGCGGGGCGAGGGGCGGGGCGAGGCGGAAGAG
                                                                                   ATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC
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74.6%;
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Pred. No. 2.9e
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The invention describes a targeting vector (positive selection vector)

(I) capable of modifying a target gene. (I) comprises two sequences

(SI and S2) homologous to a portion or region of a-target gene, a

cells comprising a modification of the target gene which involves

introducing (I) into cells capable of homologous recombination, selecting

for cells expressing the selectable marker and identifying cells

containing the modification of the target gene. Use of (I) for enriching

cells comprising disruption or modification of target gene enhances

reconvery of cells having targeting vector integrated via homologous.

recombination into the genomes of the cells. (I) is capable of modifying

target gene in a cell with high efficiency and specificity. Use of (I)

provides a faster and more efficient means for isolating and selecting

cells comprising target gene modification. Also use of (I) provides an

increase over previous technologies in both the speed and frequency at

which homologous recombination events can be recovered. (I) is also
                                                                                                                                                                                                                                                                                          Novel targeting vector modifying target gene, has first and second sequences homologous to target gene portions, a selectable marker cassette and regulator, useful for producing animals with targeted
                                                                                                                                                                                                                                                    Claim 32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCCCGCCCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTACATAACTTACGGTAAATTGGCCCGCCGGCCGGCCGACCGCCCAACGACCCCCCCGCCCATTG
                                                                                                                                                                                                                  GTGCGGCGGCAGCCAATCAGAGCGGCGCCGCTCCGAAAGTTTCCTTTTATGGCGAGGCGGC
                                                                                                                                                                                                                                                                                                                              AGTACGCCCCTATTGACGTCAATGACGGTAAATGG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA
                                                                                                                                              TTCGCCCCGTGCCCCGCTCCG-
                                                                                                                                                             ATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC
                                                                                                                                                                                                                                                                                                                                                                                                    AGTACGCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGGAGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      539;
                                                                                                                                                                                                                                                              554
                                                              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6148 BP; 1354 A; 1593 C; 1770 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                           (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This
         IgG1
                                                             cDNA; 6256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of transgenic animals containing sequence represents the positive
                           entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55.7%;
          FC
                                                                                                                                              -CGCCGCCTCGCGCCGCCCCCGGCTCTGACTGACCG
         CDNA
                                                                                                                                                                                                                                                                                                            -- ATGCAGTATTTTGTGCAGCGATGGGGGC---GGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 309.4; DB 2
Pred. No. 2.9e-54;
0; Mismatches 11
         sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1431 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    targetted
selection
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                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Regulating activity of expression product of gene transferred into living body by coexistence of interfering substance e.g. expression product receptor, given through skin to express and reduce excessive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chimeric -
Chimeric -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention comprises a method for regulating the activity of an expression product of a gene transferred into a living body. The method involves the coexistence of a protein interfering with the activity of the expression product. The method of the invention is useful for regulating the activity of an expression product. The present chimeric DNA sequence was used in an example of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CHUS )
(MARU/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rat; ss; expression product activity regulation;
pCAGGS-hSEPOR2 rat IgG1 Fc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-471702/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-NOV-2000; 2000JP-0358389
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200241922-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 6256 BP; 1314 A; 1713 C; 1758 G; 1471 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 4; Page 39-43; 49pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Maruyama H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-SEP-2001;
                                                                                                                                                                                                                                     141
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                                                                                                                                                                                                                                                                                                  GTTACATAACTTACGGTAAATTGGCCCGCCGGCTGACCGCCCAACGACCCCCCGCCCATTG
                                                                                                                                                                                                                                                                                                                                        TGGGTGGAGTATTTACGGTAAACTGCCCA-TTGGCAGTACATCAAGTGTATCATATGCCA
                                                                                                                                                                                                                                     RCGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCCATTGACGTCAA
                                                                                                                                  AGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTAC
                                                                                                                                                           AGTACGCCCCCTATTGACGTCAATGACGGTAAATGG-----
                                                                                                                                                                                    TGGGTGGACTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCA
                                                                                                                                                                                                                                                             ACGTCAATAATGACGTATGTTCCCCATAGTAACGCCAATAGGGACTTTCCCATTGACGTCAA
                                                                                                                                                                                                                                                                                       ATGACCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHUGAI SEIYAKU
MARUYAMA H.
                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus sp.
Unidentified
                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miyazaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-JP08575
                                                                                                                                                                                                                                                                                                                                                                                                       55.7%;
74.6%;
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    -ATGCAGTATTTTGTGCAGCGATGGGGGC--
                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                        Score 309.4; DB Pred. No. 3e-54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Higuchi
                                                                                                                                                                                                                                                                                                                                                                                                                      DB 24;
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    GGGGGGG 311
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Gaps

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440

276

380

320 276 260

276

500

240

200

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                                                   Query Match
Best Local :
                                         Matches
                                                                                                                                 The invention relates to a 5' and a 3' fragment of the chicken beta-actin promoter (AAF84453 and AAF84453, respectively), which exhibit promoter activity. The chicken beta-actin promoter fragments may be used to drive expression of a heterologous gene in a recombinant vector used as the active component of a genetic vaccine. The present sequence represents
                                                                                                                                                                                                                   New DNA molecule for use containing the DNA which
                                                                                                                                                                                                                                                                                                                                          09-JAN-2001
                                                                                                                                                                                                                                                                                                                                                            JP2001000188-A
                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                                                                    Cytomegalovirus; CMV; immediate-early; IE promoter enhancer; Pec promoter; chicken beta-actin promoter; recombinant vector; genetic vaccine; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytomegalovirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAF84456 standard;
                                                                                                   a cytomegalovirus (CMV) immediate-early (IE) promoter enhancer, a portion of which was used in the construction of the chimeric Pec promoter (AAF84454) in an exemplification of the invention.
                                                                                                                                                                                                Example 1; Page 12; 15pp; Japanese.
                                                                                                                                                                                                                                                     WPI; 2001-285232/30.
                                                                                 Sequence 599
                                                                                                                                                                                                                                                                         (JAPG ) NIPPON ZEON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        679
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                                                  Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGGCGGCCCTATAAAAAGCGAAGCGCGGGGGGGGGGAGTCGCT--GCGTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGCGGCGGCAGCCAATCAGAGCGGCGCGCTCCGAAAGTTTCCTTTTATGGCGAGGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGGCGGCCCTATAAAAAGCGAAGCGCGCGGCGGCGGGAGTCGCTGCGCGCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytomegalovirus
                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                740
                                         Conservative
                                                                                  B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                              99JP-0174804
                                                                                                                                                                                                                                                                                                                   99JP-0174804
                                                                                                                                                                                                                                                                                                                                                                                                                                             (CMV) immediate-early (IE)
                                                                                  152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA; 599 BP
                                                 46.3%;
97.8%;
                                                                                 P
                                                                                 144 C;
                                                                                                                                                                                                                      as
is
                                                                                                                                                                                                                      a promoter for preparing a recombinant used for preparing a vaccine -
                                         0;
                                       Score 257; DB 22;
Pred. No. 1.3e-43;
0; Mismatches 5;
                                                                                  144 G;
                                                                                 159 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                             promoter enhancer
                                                                                  0
                                                                                  other;
                                                             Length
                                         Indels
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                                        Gaps
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AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGC

Query Match Best Local S Matches 270

Local Similarity hes 270; Conserv

Conservative

46.18; 97.88;

Score 256; DB 20; Pred. No. 2.1e-43; 0; Mismatches 5;

Sequence

589

BP;

157

A; 140 C; 143 G; 149 T;

0 other;

Length Indels

1;

Gaps

1;

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RESULT 13
AAX15163/c
ID AAX151
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                              The present sequence represents the Human cytomegalovirus promoter region. The compositions of the invention bind to this sequence. The specification describes a composition that comprises low density lipoprotein (LDL) and apolipoproteins for the binding and in vivo transport of nucleic acids. The composition is used to deliver nucleic acids to eukaryotic cells, in vivo or in vitro, for expressing a therapeutic polypeptide or antisense molecule (or ribozyme). Specifically they are used for gene therapy of cancers (particularly non-small cell lung carcinoma), diabetes, cystic fibrosis and
                                                                                                                                                                                         Composition comprising nucleic acid bound used for delivering nucleic acid to cell-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human cytomegalovirus promoter region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX15163 standard;
                                                                                                                                                                                 antisense treatment
                                                                                                                                                                                                                                  WPI; 1999-070331/06.
                                                                                                                                                                                                                                                        Guevara JG,
                                                                                                                                                                                                                                                                                                         14-MAY-1998;
13-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                      17-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                            Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  apolipoprotein; binding; in vivo transport; nucleic acid; binding nuclear localisation sequence; gene therapy; cancer; cystic fibros
                        arteriosclerosis.
                                                                                                                                                         Example 4; Page 74;
                                                                                                                                                                                                                                                                                 (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                              10-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       nuclear localisation sequence; non-small cell lung carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-APR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGTACGCCCCTATTGACGTCAATGACGGTAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA 180
                                                                                                                                                                                                                                                                                                                                                                                                                   cytomegalovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                          cytomegalovirus promoter region; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                        Hoogeveen
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97US-0874807
                                                                                                                                                                                                                                                                                                                                              98WO-US11927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                        293pp;
                                                                                                                                                                                                                                                        RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              589
                                                                                                                                                         English.
                                                                                                                                                                                                                                                          Moore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene therapy; cancer; cysti
diabetes; arteriosclerosis;
                                                                                                                                                                                             ound to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  276
                                                                                                                                                                                           for gene therapy and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         185
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RESULT 14
AAH24425
ID AAH24
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                    Query Match
Best Local S
Matches 270
                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                              X_2 = Gly-Sér-Leu or Pro-Leu-Ala.

The signal peptides are useful in the preparation of human growth hormone and transformed chlorella. Signal peptides, DNA encoding the peptides, gene expression cassettes, recombinant vectors containing the cassettes, and transformants having the vectors are provided. The present sequence is a promoter which may be used in the invention.
                                                                                                                                                                                                                                                                                                                                                                          JP2000354490-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cauliflower
                                                                                                                                                              The present sequence is provided in a specif peptides for expression and secretion of a peptides are of the formula:
Met-Ala-Asn-Lys-X_1-(Leu)_n-X_2-Ala-Ser-Gly.
                                                                                                                                                                                                                                      New
and
                                                                                                                                                                                                                                                                       WPI;
                                                                                                                                                                                                                                                                                                                                                                                              Cauliflower mosaic virus
                                                                                                                                                                                                                                                                                                                                                                                                                            Cauliflower
                                                             Sequence
                                                                                                                                                                                                                Example 1; Page 12; 15pp; Japanese
                                                                                                                                                                                                                                                                                         (TOYT ) TOYOTA JIDOSHA
                                                                                                                                                                                                                                                                                                             15-JUN-1999;
                                                                                                                                                                                                                                                                                                                                  15-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                      26-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH24425;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAH24425 standard; DNA; 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 348
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                             an integer of 5-15;
 N
                                                                                                                                                                                                                                      signal peptides useful transformed chlorella

    Ser or Leu;

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTACATAACTTACGGTAAATGGCCCGCCTGGCCTGACCGCCCAACGACCCCCCGCCCATTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001-275809/29
                                                                                                                                                                                                                                                                                                                                                                                                                 expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTACGCCCCCTATTGACGTCAATGACGGTAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTACGCCCCTATTGACGTCAATGACGGTAAATGG 276
 AGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGC
                     1 Similarity
270; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                             mosaic virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                mosaic virus promoter.
                                                            BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                             99JP-0168271
                                                                                                                                                                                                                                                                                                                                  99JP-0168271
                                                                                                                                                                                                                                                                                                                                                                                                                 protein
                              46.18;
                                                            A; 143 C; 141 G;
                                                                                                                                                                                                                                                                                                                                                                                                                 ; promoter; signal 
production; human
                                                                                                                                                                                                                                           for the preparation
                     0,
                              Score 256;
Pred. No. 2
                    Mismatches
                                                            157 T; 0 other;
                                                                                                                                                                                   specification relating to of a protein in chlorella.
                    DB 22;
2.1e-43;
hes 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                313
                                                                                                                                                                                                                                                                                                                                                                                                                peptide;
growth ho
                                                                                                                                                                                                                                                 of human
                                       Length 590;
                                                                                                                                                                                                                                                                                                                                                                                                                  hormone;
                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                  chlorella;
ormone; ds.
                                                                                                                                                                                                                                                growth hormone
                                                                                                                                                                                     to signal
lla. The
                     Gaps
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                                 A method has been developed of increasing prostanoid production in vivo comprising delivering and hyperexpressing a prostaglandin synthase gene in cells. The method can be used for gene therapy. The method is useful for the treatment of diseases such as pulmonary embolus, myocardial infarction and general lung disease (e.g. adult respiratory distress syndrome). Generally the present invention provides a plasmid comprising a cytomegalovirus (CMV) derived promoter sequence driving the coding region for ovine prostaglandin G/H synthase (PGH). In order to increase the expression of the gene, the construct also contains a short translation augmenting sequence and a portion of the 3' untranslated region from the human growth hormone (hGH) gene. The present sequence represents the CMV promoter sequence used in the exemplification of the
                                                                                                                                                                                                                                         Increasing prostanoid production in vivo comprising delivering hyperexpressing a prostaglandin synthase gene in cells, useful treating e.g. myocardial infarction and general lung disease -
                                                                                                                                                                                                                                                                                                                                                                                 19-AUG-1991;
21-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            prostaglandin G/H synthase; plasmid; prostanoid;
cardiant; thrombolytic; antiinflammatory; gene t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cytomegalovirus; CMV; promoter; human growth hormone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytomegalovirus derived promoter sequence SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ95643 standard;
                                                                                                                                                                                                                  Disclosure; Column 7-10; 11pp; English.
                                                                                                                                                                                                                                                                                                 HPI;
                                                                                                                                                                                                                                                                                                                            Meyrick B,
                                                                                                                                                                                                                                                                                                                                                                                                                        02-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    adult
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pulmonary embolus; myocardial infarction;
                                                                                                                                                                                                                                                                                                                                                      (UYVA-) UNIV VANDERBILT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytomegalovirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  respiratory distress syndrome;
                                                                                                                                                                                                                                                                                                                            Canonico
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                 91US-0746941
93US-0080221
                                                                                                                                                                                                                                                                                                                                                                                                                        95US-0459493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   763
                                                                                                                                                                                                                                                                                                                           Brigham
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                                                                                                                                                                                                                                                                                                                            7,
                                                                                                                                                                                                                                                                                                                              Conary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       277
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lung disease;
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                         1;
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